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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,451	02/19/2004	Hans-Peter Foser	IVd15US	5190

7590
John C. Thompson
69 Grayton Road
Tonawanda, NY 14150

01/04/2007

EXAMINER

WERNER, JONATHAN S

ART UNIT

PAPER NUMBER

3732

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/782,451	Applicant(s) FOSER ET AL.	
	Examiner Jonathan Werner	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/5/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's amendment received on 10/5/06.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 and 19-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1, Applicant recites the limitations "the parts" and "the assembly." There is insufficient antecedent basis for these limitations in the claim since it is not quite clear which parts the Applicant is referring to, nor which parts in particular comprise said assembly. Similarly, as to claim 20, Applicant recites the limitation "the assembly." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3732

3. Claims 1-10, 12-24 and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Braiman (US 5,346,397). As to claims 1 and 20, Braiman discloses a dental restoration comprising a base structure (13) adapted to be placed over a prepared tooth stump (column 3, lines 53-54); a pre-fabricated (column 4, lines 5-6) comparatively hard (column 2, line 25) over structure (10) which partially covers the base structure when assembled (Figure 3), wherein the over structure has at least one pre-configured bite element (top portion, Figure 3); and a coupling element for coupling the base structure and the over structure with one another (Figure 3), the coupling element including an interconnecting material (14) which interconnects the base structure and the over structure, wherein the restoration can be constructed so that it does not need to be fired since Braiman discloses that a catalyst can be used to cause the components of the restoration to harden by photo-initiation (column 3, lines 65-67). Examiner furthermore remarks that in regard to claim 1, it should be noted that Applicant is claiming an article of manufacture and not the process of forming/making the device. Accordingly, the manner in which the device is formed in claim 1, i.e. not requiring a time consuming firing of the assembly, is considered a product-by-process claim and is hence given little patentable weight since the final product is shown as described. As to claim 2, the over structure includes a covering element (11) that is interconnected with the bite element and covers over at least one of a lingual, buccal, mesial, and distal region of the base structure, the covering element being interconnected to the base structure via the interconnecting material (Figure 3). As to claim 3, the interconnecting material extends in a surface covering manner between the

base structure and the over structure and the interconnecting material fills the area between the base structure and the over structure (Figure 3). As to claims 4 and 21, Figure 3 shows the over structure has a an inner contour that is compatibly configured with respect to an outer contour of the base structure; and the inner contour of the over structure and the outer contour of the base have respective circular shapes. As to claim 5, the bite element extends over the teeth of a dental patient receiving the restoration and is configured as a single member component (Figure 3). As to claim 6, it can be seen from Figure 3 that the restoration extends to preparation borders of the teeth and the covering element covers the medial and distal sides of the teeth. As to claims 7 and 24, the overstructure partially covers the base structure and the uncovered portion of the base structure is covered by an opaque material (column 3, lines 50-51). As to claims 8 and 26, Figure 3 shows the over structure partially covers the base structure and the uncovered portion of the base structure is covered by the interconnecting material. As to claims 9 and 10, the over structure is formed by the bite element and the covering element and the covering element is comprised of ceramic (column 4, line 29-31) or plastic (column 3, lines 63-64). As to claim 12, the interconnecting material is comprised of ceramic (column 3, lines 50-51). As to claim 13, the plastic is a polymerizable plastic (column 3, line 64). As to claim 14, the base structure is a metal frame (column 3, line 50). As to claim 15, Figure 13 shows the dental restoration is configured for a pre-molar or a molar. As to claim 16, the bite element of the overstructure forms a tooth protuberance (Figure 3). As to claim 17, the over structure is a single member component and the bite element and the covering element are

Art Unit: 3732

comprised of the same material (Figure 3). As to claims 19 and 27, Figure 3 shows that the base structure is capable of being securable to a peg supported by a jaw of a patient and an attachment element (11) operable to be secured to neighboring tooth structures. As to claim 22, Figure 3 shows the step of pressing the over structure onto the interconnecting material. As to claim 23, the interconnecting material is hardened by heating (Abstract) or by irradiating with light (i.e. column 3, line 67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braiman in view of Fisher (US 6,183,256). Braiman discloses the dental restoration as previously described but fails to disclose the ceramic is a selected one of an aluminum oxide ceramic, a zirconium oxide ceramic, a glass ceramic, and a mixture of such ceramics. Fisher, however, teaches a dental restoration with a covering element (20) that is made of aluminum oxide ceramic or zirconium oxide ceramic (column 1, lines 40-47 & column 2, lines 19-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use either an aluminum oxide ceramic or zirconium oxide ceramic as the material of choice in order to promote secure bonding as taught by Fisher.

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braiman in view of Sozio et al. (US 4,585,417). Braiman discloses the dental restoration as previously described but fails to disclose evaluating a prospective bite situation and manipulating the base structure and over structure relative to one another in an evaluation device such as an articulator. Sozio, however, teaches a method of making dental restorative device (Abstract) that is manipulated by using an articulator (column 7, lines 60-64) to simulate jaw movement and hence evaluate a prospective bite situation. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to evaluate a prospective bite situation and manipulate the base structure and over structure relative to one another using an articulator in order to simulate proper jaw movements as taught by Sozio.

6. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braiman. Braiman discloses the dental restoration as previously described but fails to disclose the step of cleaning a spillover of interconnecting material after the step of pressing the over structure onto the material. However, it would be an obvious matter of choice to one having ordinary skill in the art at the time of applicant's invention to clean said spilled interconnecting material so that desired shape of the dental restoration can be preserved in order to properly fit it within a patient's mouth.

Response to Arguments

7. Applicant's amendments of the claims are sufficient to overcome the rejection under 35 U.S.C. 101. Accordingly, said rejection has been withdrawn. Likewise, Applicant's amendments of the claims are sufficient to overcome the previously made rejections under 35 U.S.C. 112, second paragraph. However, a new ground for rejection of claims 1-17 and 19-29 under 35 U.S.C. 112, second paragraph, has been made as a result of said amendments as detailed above.

8. Applicant's arguments filed 10/5/06 have been fully considered but they are not persuasive. As previously described in the rejection above, Braiman discloses the pre-fabricated over structure is comparatively hard and that the method does not require a time consuming firing of the assembly since Braiman discloses the components of the restoration can be hardened by light curing them. As discussed above, the newly added limitation that the method does not require a time consuming firing of the assembly is given little patentable weight in claim 1 since it acts as a product-by-process type claim. Furthermore, Examiner notes that even in regard to claim 20, this new limitation is given limited patentable weight since claim 23 still explicitly points out that the treatment of hardening the interconnecting material can be carried out by heating – which is contradictory to said newly added limitation.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

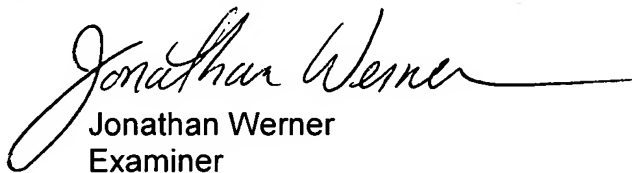
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

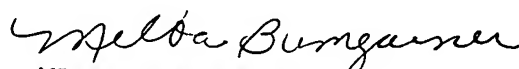
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jonathan Werner
Examiner

12/21/06


MELBA N. BUMGARNER
PRIMARY EXAMINER